

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The final Office Action dated October 27, 2010, has been received and its contents carefully reviewed.

In this response, no claims are amended or canceled. Accordingly, claims 1, 2, 5, 10, and 13 are currently pending. Reexamination and reconsideration of the pending claims is respectfully requested.

The Office Action rejects claims 1-2, 5, 10, and 13 under 35 U.S.C. § 103(a) as being unpatentable over Publication No. EP 0293031 to Gumm et al., (hereinafter "Gumm") in view of Publication No. DE 196 50 861 to Sassone (hereinafter "Sassone") in view of Publication No. DE 1816011 to Schmidt. (hereinafter "Schmidt"). The rejection is respectfully traversed.

Claim 1 recites an aqua stopping device for a washing device, comprising a hollow valve body including a passage formed within; a plurality of valves for opening and closing the passage, wherein the plurality of valves are enclosed in the hollow valve body; signal wires connected to terminals of the valves; an inner case enclosed by the hollow valve body, a wall of the inner case separating an interior of the inner case from the plurality of valves enclosed in the hollow valve body; a portion of a connecting wire intruding into the hollow valve body and connected to the signal wires at the interior of the inner case; and a filler fills an area where the connecting wire connects with the signal wires at the interior of the inner case.

The Office Action at page 3 uses Fig. 2 to show that Gumm teaches an aqua stopping device for a washing device having a hollow body including a passage formed within. Valves are aligned to open and close the passage. Signal wires are connected to a terminal of the valves. A connecting tube is attached to a lower portion of the valve body for passing wash water there through. An outer tube is disposed around an exterior of the connecting tube for enclosing the connecting tube.

However, the Office Action at page 5 recognizes the problem of Gumm's aqua stopping device, which is that Gumm's aqua stopping device provides no structure for preventing liquid from contacting the wires.

Thus, the Office Action relies on Sassone to disclose insulating and waterproofing the electrical split. However, Sassone discloses that a thermoplastic material which forms the body 30 is sprayed on the housing 2A. See page 3 of the English language translation of Sassone. The thermoplastic material is sprayed on the housing 2A until it covers the housing 2A, terminal ends 37, and electromagnetics. In other words, in Sassone, there is simply no consideration taken to minimize the use of the thermoplastic material.

The Office Action at page 5 makes a leap, when there is simply no teaching in Gumm and Saasone, that it would have been obvious to one skilled in the art at the time of the invention to modify Gumm in view of Sassone to place the filler at the area of the electrical connection only to save “filler”. Nowhere does Gumm or Sassone, individually or in combination, disclose or even suggest placing a filler at the area of the electrical connection only.

To further Applicants position regarding non-obviousness of the claimed invention, Applicants rely on the contents of the published Federal Register/Vol. 75, No. 169/Wednesday, September 1, 2010, regarding obviousness after KSR, where the Register stated that “When a combination invention involves additional complexity as compared with the prior art, the invention may be nonobvious unless an examiner can articulate a reason for including the added features or steps.”

Here, the claimed invention uses an inner case enclosed by the hollow valve body, a wall of the inner case separating an interior of the inner case from the plurality of valves enclosed in the hollow valve body; a portion of a connecting wire intruding into the hollow valve body and connected to the signal wires at the interior of the inner case; and a filler fills an area where the connecting wire connects with the signal wires at the interior of the inner case.

Adding the teachings of Schmidt, it is clear that the combination of the applied references do not disclose or suggest the above-noted features since the Office Action at page 5 acknowledges that “Gumm et al. as modified by Sassone et al., as modified by Schmidt, does not teach an inner case”.

The Office Action, however, rationalizes the deficiencies of Gumm, Sassone, and Schmidt, by arguing that “the applicant has not established any criticality to the feature. That

“It appears to be an artifact from the manufacturing process used to install the filler and is not relevant in the final product.”

This statement is simply incorrect. As set forth in the specification, the claimed “inner case” goes to the heart of the Applicants’ claimed aqua stopping device.

The specification states that “An object of the present invention is to provide a washing device and an aqua stopping device for a washing device that enables an increase in production of the aqua stopping device by reducing its manufacturing cost and time.” See paragraph [9], emphasis added. “Another object of the present invention is to provide a washing device and aqua stopping device for the washing device that make the aqua stopping device user-friendly by reducing its weight.” See paragraph [10], emphasis added.

Previously, as known to the applicants, the entire inner cavity of the aqua stopping device was filled with a filler. “However, when a filling fills the entire inner cavity of the aqua stopping device, the manufacturing cost of the aqua stopping device rises, more time is needed to manufacture the product, and the device’s weight increases, making it user-unfriendly. See paragraph [8] of the Specification.

In fact, it appears that Schmidt is a perfect example of the problematic aqua stopping device that Applicants described above. See the aqua device illustrated on page 5 of Schmidt.

Thus, as set forth in paragraph [42], the claimed aqua stopping device allows for only the interior of the inner case to be filled with filler, instead of the conventional filling of the entire interior of the outer case with filler, allows for the aqua stopping device to become lighter, and the amount of filler needed decreases, reducing manufacturing costs.

Applicants claimed “inner case” provides many benefits and advantages over what is disclosed in the applied references. Isolating the plurality of valves from the interior of the inner case where the connecting wire connects to the signal wires, and at the interior of the inner case the connecting portion at the interior of the inner case, and using a filler to fill an area where the connecting wire connects with the signal wires at the interior of the inner case

provides for isolating from valves that may potentially leak water. Furthermore, less filler may be used which reduces manufacturing cost as well as making it light.

The use of an "inner case" was never contemplated in the cited references, yet the inner case provides for many benefits and advantages. Thus, for at least the reasons as discussed above, claim 1 recites patentable subject matter. Claims 2, 5, 10, and 13 are at least patentable by virtue of their dependency from claim 1.

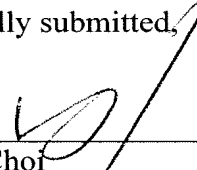
The application is in condition for allowance. Early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

Respectfully submitted,

Date: January 26, 2011



Yong S. Choi
Registration No. 43, 324
MCKENNA LONG & ALDRIDGE LLP
1900 K Street, N.W.
Washington, D.C. 20006
Telephone No: 202-496-7500